

# High Dimensional Small Data

19-20 October 2018, Venice, Italy

## 19 October 2018

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9:00-9:30 Registration

9:30-9:40 Welcome

### MORNING SESSION

9:40-10:20 PHILIP J. BROWN (University of Kent, UK)  
Title: *Competing Sparsity: Modelling with Hierarchical Shrinkage Priors*

10:20-11:00 GUIDO CONSONNI (Università Cattolica del Sacro Cuore, Milano, IT)  
Title: *Objective Bayes Covariate-Adjusted Sparse Graphical Model Selection*

11:00-11:30 **Coffee Break**

11:30-12:10 AKI VEHTARI (Aalto University, FI)  
Title: *Projective Inference in High-dimensional Problems: Prediction and Feature Selection*

12:10-12:50 MONICA BILLIO (Università Ca' Foscari, Venezia, IT)  
Title: *Bayesian Nonparametric Sparse VAR Models*

12:50-14:30 **Lunch**

### AFTERNOON SESSION

14:30-15:10 DARREN GREEN (GlaxoSmithKline, UK)  
Title: *The Quantification of Lead Optimisation*

15:10-15:50 MARTIN S. RIDOUT (University of Kent, UK)  
Title: *Level-Screening Designs for Factors with Many Levels*

15:50-16:20 **Coffee Break**

16:20-18:00 **Speed poster presentation**

20:00 **SOCIAL DINNER**

## **20 October 2018**

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### **MORNING SESSION**

9:30-10:10 IRENE POLI (Università Ca' Foscari, Venezia, IT)  
Title: *The Evolutionary Design for Optimisation*

10:10-10:50 CHRIS LUSCOMBE (GlaxoSmithKline, UK)  
Title: *Intelligent Chemical Space Exploration: The Old and the New*

10:50-11:20 **Coffee Break**

11:20-12:00 OLIVER WATSON (Evariste Technologies Ltd, UK)  
Title: *A Decision Theoretic Approach to Model Evaluation in Computational Drug Discovery*

12:30-14:00 **Lunch**

## Speed poster presentation

### *List of speakers*

K. Abramowicz, A. Pini, L. Schelin, S. Sjöstedt de Luna, A. Stamm, S. Vantini

**A functional local inferential approach for assessing knee kinematics after anterior cruciate ligament rupture**

L. Anderlucci, F. Fortunato, A. Montanari

**Ensemble classification with random projections: classifier selection and variable importance**

M. Billio, R. Casarin, S. Kaufmann, M. Iacopini

**Bayesian dynamic tensor regression**

M. Billio, R. Casarin, M. Iacopini

**Bayesian Markov switching tensor regression for time-varying networks**

F. Della Marra, V. Mameli

**Support Vector Regression with Group-Lasso penalty**

V. Distefano, D. Slanzi, V. Mameli, I. Poli

**A statistical analysis of urbanization-driven transformations in Zhejiang province**

M. Fontana, M. Tavoni, S. Vantini

**Functional sensitivity analysis and significance testing, with an application to integrated assessment models**

M. Fordellone, V. Tomaselli, M. Vichi

**Simultaneous clustering and dimensionality reduction in a PLS-SEM approach: a composite indicator to measure immigrant integration**

V. Mameli, D. Slanzi, I. Poli

**Clustering binary covariates for modelling high-dimensional data**

R. Metulini, M. Carpita

**On clustering daily mobile phone density profiles**

L. Sahibi, A. Abbruzzo

**High-dimensional structure inference of Dynamic Bayesian Networks with an application in genetic data analysis**

D. Slanzi, V. Mameli, P.J. Brown

**A comparative study on high-dimensional Bayesian multivariate regression with binary predictors**

S. Tonellato

**Dirichlet processes, posterior similarity and graph clustering**